Interesting Books and No Translation: Two Factors to Increase the Amount of Reading in an Extensive Reading Program

Nobuko SAKURAI

Abstract

This paper discusses predictors of the amount of reading in an extensive reading program. Two multiple regression analyses were conducted with the total number of words read as the dependent variable and replies to the questionnaires as independent variables. Judging from the *t* values, the most influential predictor of the first model obtained was that readers stop translating stories into Japanese. How interesting books were contributed to the second model most. Despite the fact that two group of first-year university students who participated in the current study differed in the length of experience in extensive reading, these two predictors were shared by the two models. Although the values of adjusted R^2 indicate that stronger predictors exist other than the independent variables utilized in this study, the outcomes suggest that the amount of reading increases when students read interesting books without translation.

Keywords: extensive reading, the amount of reading, multiple regression analysis, predictor, translation

Introduction

Extensive reading (ER) has been gaining popularity in recent years. The first ER World Congress held in Japan in 2010 welcomed novice researchers as well as well-known authors from many parts of the world. According to Furukawa, Takase and Nishizawa (2009), the population of extensive readers has increased dramatically in all types of educational institutes across Japan (as cited in Takase, 2010). Wider varieties of books for ER available at more reasonable prices now compared to decades ago also indicate that the practice is widespread. Helgesen (2008) states that publishers acknowledge the increase in sales of ER books and that more space is allocated for graded readers in bookstores. All of these are suggestive that ER is getting more attention and it is being accepted as an established method of teaching English.

ER is one approach to teach reading and is essential for a reading program. Intensive reading (IR) involves the deep understanding of a short text with various tasks led by the teacher (Nuttall, 1982). In contrast, students individually choose and read a large amount of

easy books for pleasure in an ER program (Day & Bamford, 1998). In sum, ER is reading for fluency, while IR is for accuracy. According to Nuttall (1982), ER is complementary to IR, therefore, necessary.

A great deal of research has proven the positive impact of ER on various aspects of language proficiency. Krashen (2004) and Day & Bamford (1998) summarized studies that proved that vocabulary, reading comprehension, spelling, writing and grammar in addition to overall language ability improved as a result of ER. Krashen (2004) also reported that ER was more effective than regular, conventional reading instructions. Likewise, Brown, Waring and Donkaewbua (2008) stated that motivation for language learning and confidence in reading in a foreign language (FL) developed due to ER. Moreover, young learners of English as a second language (L2) who were in ER programs achieved improvement in all aspects of the target language in the nine empirical studies outlined by Elley (1991). Research has also been conducted with Japanese learners of English to confirm the effectiveness of ER. In all of the three experiments carried out by Mason and Krashen (1997), the experimental groups of university students who read extensively outperformed the control groups that were taught traditionally. Engineering majors at a technical college who read for 45 minutes a week for 5 years in their ER program reached the level of TOEIC 550 on average which was higher than the national average of third-year university students whose major was English in 2009 (Nishizawa, Yoshioka & Ito, 2010). Furukawa (2008) compared the scores of the test called the Assessment of Communicative English Exam (ACE) between 10th graders nationwide and 8th graders who received Sustained Silent Reading (SSR) instruction and read extensively at his *juku*, a private tutoring school, in Tokyo. His conclusion that the scores of his students surpassed those of the teenagers who were two years older supported the significant influence of ER on improvement in language ability.

The amount of reading is crucial in ER programs. As the ten principles established by Day and Bamford (1998) suggest, students need to read a great deal of easy books. The amount of reading is what attributes to overall language development. In the aforementioned study, Nishizawa, Yoshioka and Ito (2010) offered their valuable insights from the careful observation of accumulated data at their technical college. Their engineering-major students got accustomed to reading without translating English into Japanese when the amount of their reading reached 100,000 words. After the majority of students accomplished 300,000 words, the class average score of TOEIC improved. One million words of reading enabled individual students to do better on TOEIC. Sakurai (2011) investigated if the effect of ER was to appear even when the total number of words read was below 100,000. She reported

that every 10,000 words read ranging from 20,000 and 70,000 words favorably correlated with the increase in the TOEIC score. Moreover, the outcome of a regression analysis in a study carried out with Vietnamese government officials revealed that the amount of reading was the only significant predictor of the gain in test scores among others (Renandya, Rajan & Jacobs, 1999). These studies are some examples that confirm that more reading facilitates the progress in language proficiency.

It is, therefore, fundamental that ER program organizers assist learners to make a habit of reading in English regularly to ensure that the number of words students read steadily increases. What motivates learners to read, then, seems worth exploring. Camiciottoli (2001) analyzed the reading frequency and attitude of Italian university students in an EFL program. The multiple regression analysis exhibited that a high frequency of and positive attitude to reading in English were significantly correlated with the reading habit in the first language (L1) and the experience in the L2 culture. Takase (2007) examined motivational factors of Japanese high school students who were in an ER program for one year. The result of the multiple regression analysis showed that intrinsic motivation for L1 reading and intrinsic motivation for L2 reading were the two factors that statistically significantly predicted the number of words read. These findings are theoretically beneficial. However, it is not plausible for educators to control experience that has been acquired before learners start an ER program as well as learners' nature and characters. Pedagogically speaking, more concrete predictors seem desirable to be identified. Hence, the research question addressed in this study is: what factors that can be controlled by educators positively influence the number of words students read in an ER program?

Method

Participants

Participants of the present study were first-year students at a private university in Kyoto who voluntarily responded to questionnaires concerning ER. All of them were taking either or both of the two main English courses offered by the university, Oral Communication or/and Reading Skills. They were placed into five different levels based on the results of the placement test administered at the beginning of their first semester. As a course requirement, the subjects were expected to do extensive reading on their own outside the classroom. They needed to take quizzes on Moodle after reading ER books of the assigned level that were checked out from the library. Depending on the total number of words they

accumulated by passing quizzes, the students had up to five points added to or deducted from their final grades.

In an effort to assure the validity of predictors, two separate groups from different school years participated in this study. 2590 students enrolled in the program in 2010. Among those, 1222 students cooperated in answering questions. The 2011 group consisted of 1166 respondents out of the total enrollment of 2458.

Questionnaires

In order to contrast results, questionnaires and their administration differed between the first and second groups. Firstly, two slightly altered questionnaires were utilized. The first six questions with regard to ER books, language growth and reading speed overlapped. In the consecutive questions, the participants who started the ER program in 2010 were inquired about strategies they used when reading. On the other hand, the two questions concerning the use of translation during ER were responded by the students in 2011. A question that asked about how long the subjects spent on reading was eliminated from both of the questionnaires as it was obvious that the result of this question would correlate with the number of words they read. The remaining questions that were irrelevant to the present study were also excluded. Both questionnaires were formulated in Japanese. Their complete translation can be found in Appendix A.

Secondly, the timing when the two questionnaires were given was different. The participants who started the program in 2010 responded to the questionnaire after doing ER for one year, whereas the data of 2011were the result of experience in ER for one semester.

Procedure

The first questionnaire was administered in January 2011 for the group who enrolled in 2010, and the other in July 2011 for the 2011 group at the end of spring semester. All the answers were submitted online, and 1,000-word awards were automatically added to the ER records of these voluntary respondents. The computer system coded the choice that appeared first on the questionnaire as 1 in contrast to the regular coding that the most positive answers are replaced by the biggest numbers. The replies to the questions and the total number of words the students accumulated were transferred first to Excel and then to SPSS (version 18.00). The data of the students who accumulated no words were eliminated as the current study concerns the influence of independent variables on the total number of words read in an ER program. Therefore, the number of subjects was reduced from 1222

Table 1 *Summary of the participants and questionnaires*

	N	Experience in ER	Questionnnaire	
			Administration	Number of questions
2010	1208	one academic year	January, 2011	6 common + 6 about strategies
2011	1137	one semester	July, 2011	6 common + 2 about translation

Note. 14 and 29 students who did not accumulate any words were excluded from the data of 2010 and 2011 respectively.

to 1208 in the first group and from 1166 to 1137 in the second group. Table 1 summarizes the information about the students and questionnaires. Correlation was obtained to decide independent valuables, and multiple regression was performed with the total number of words read as the dependent valuable. The backward method was adopted for the following reasons. Oda (2007) explains that the stepwise, forward and backward methods of multiple regression should be used when valid valuables are unknown. The stepwise method in SPSS is similar to the forward method which could eliminate an important predictor (Field, 2009). Therefore, the backward method seemed most appropriate. After the models were obtained, residuals in addition to multicollinearity were assessed to determine if the models computed with the two sets of data were accurate as recommended by Field (2009).

Results and Discussion

The results of Pearson correlation coefficient revealed that the responses to the questions #1 (r = -.090), #2 (r = -.149), #6 (r = -.129), #7 (r = .154), #8 (r = .079), #11 (r = -.092) and #12 (r = -.102) of the 2010 questionnaire significantly correlated with the total number of words read at the $p < 0.01$ level. Therefore, these seven items were utilized as independent variables for multiple regression analysis. Table 2 exhibits the model obtained. Since Moodle automatically coded the most positive answer to each question submitted online as 1, special attention needs to be paid when the t values are interpreted. The model shows that the number of words students read increases when books are interesting, when students become able to read faster, when they take notes and review words they do not know, when they do not translate English into Japanese, and when they do not guess the meaning of unknown words. As the t values show the degree of contribution to the model (Oda, 2007), it can be said that translation is the most influential predictor. This indicates that the number of words students read will increase when they start reading English in English.

Table 2 *The result of multiple regression analysis with the data of 2010*

Significant variable	*β*	*t*
Q2: Books were interesting.	-.108	-3.561***
Q6: Reading speed increased.	-.089	-2.938**
Q7: I guessed unknown words.	.124	4.280***
Q11: I reviewed words.	-.065	-2.282*
Q12: I translated into L1.	-.133	-4.713***
R = 0.258		
R^2 = 0.066		
Adjusted R^2 = 0.063		
F = 17.098***		

* = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$

Question #1 concerning the difficulty of books together with #8 that was about ignoring unknown words was eliminated from the model.

The same steps were taken with the data of 2011. The responses to the questions #1 (r = -.152), #2 (r = -.232), #6 (r = -.137), #7 (r = -.076) and #8 (r = -.078) that correlated with the total number of words read were entered for multiple regression analysis as independent variables. As shown in Table 3, the model consists of three predictors. According to the model, students read more when books are easy and interesting and when students stop changing English into Japanese. The most influential predictor is how interesting books are. Question #6 regarding to reading speed and #8 that inquired about how much translation was reduced were excluded from the model.

As summarized in Table 1, the two groups of participants differed in the length of experience in the ER program. Also, the two questionnaires responded were not identical. Despite these discrepancies, the two models share two predictors. One of the two is how interesting books that are provided in ER programs are. This is best summarized in the comment by Nuttall (1982) that enjoyable books are “more powerful than any other

Table 3 *The result of multiple regression analysis with the data of 2011*

Significant variable	*β*	*t*
Q1: Books were easy.	-.082	-2.682**
Q2: Books were interesting.	-.207	-6.815***
Q7: I translated into L1.	-.077	-2.687**
R = 0.257		
R^2 = 0.066		
Adjusted R^2 = 0.064		
F = 26.814***		

* = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$

motivation" (p. 171). Takase (2010) states that reading materials are one of the three most important factors for the success of ER programs. After all, ER programs can neither exist nor succeed without intriguing books (Day & Bamford, 1998).

Another question about ER books was included in the questionnaires. It inquired about the difficulty of books. This has become one of the predictors of the second model, whereas it has been eliminated from the 2010 model. Readers become able to cope with longer, more challenging books as they continue ER. Reading ability develops as students read more for a longer period of time, so it is possible that experienced readers cares more about how interesting books are than about how easy they are.

The other common predictor is translation. Translation, by definition, is "a process of replacing a text in one language by a text in another language" (House, 2009, p. 4). According to Cook (2010), it is "slow, laborious work" (p. 88). His way of describing translation suggests that translating is different from reading in nature. Although the majority of English reading classes at junior and senior high schools across Japan are still taught by means of translation, translation is not actually the same as reading. This can be proved by focusing on the system of the brain. Wolf (2007/2008) reported that different parts of the brain were activated when a text written in English and a text in Japanese were read. This implies that the brain functions differently depending on a language. Price, Green and von Studnitz (1999) conducted a study using PET to investigate the mechanism of translation and confirmed that more areas of the brain were activated during translation. In neuroscientific perspective, translation is not equivalent to reading. It involves more work. It is speculated that learners start enjoying English in English more when they stop translating stories into Japanese. This may result in the increase in the amount of reading.

There seems to be another reason why no translation can lead to more reading. Translation is considered to be one type of strategies L2/FL learners use. O'Malley and Chamot (1990) describe translation as a cognitive strategy to "use L1 as a base for understanding and/or producing L2" (p. 126). Saito, Horwitz and Garza (1999) conducted a study with learners of French, Russian and Japanese as a FL and concluded that reading in a FL could cause anxiety (1999). They also reported that translation was a predominant strategy used when many of the participants of the study approached a text in FL. What is inferred from this research is that students resort to their L1 when they are anxious. This suggests that as soon as students start enjoying ER books and feeling comfortable with them, they do not have to rely on translation anymore, so they read more.

Another issue related to translation is reading speed. Students who have been trained

in the Grammar Translation method translate everything word by word. They tend to pay more attention to smaller parts rather than having a big picture of storylines. This is time consuming, and does not facilitate fluency to develop. Reading speed can be influenced positively when students stop translating stories into Japanese. As Nuttall (1982) says, comprehension is closely linked to speed. It is reasonable to say that those who do not translate read faster and understand stories better, so the amount of reading grows.

Finally, the accuracy of the models yielded should be discussed. First, the F ratios of the two models are statistically significant at the $p < 0.001$ level. This means that the predictors do not predict the outcome by chance (Field, 2009) although what can be predicted by the two models is only 6.3% and 6.4% respectively (Oda, 2007). What is suggested is that these two models are reliable although other factors that predict the number of words to be read exist than the ones that were used in the current study. Multicollinearity, which destabilizes the estimates of predictors (Oda, 2007 & Field, 2009), is not present in the two models according to the diagnosis of the Variance Inflation Factor (VIF) values calculated by SPSS (Oda, 2007). Extreme cases should also be investigated (Field, 2009). When more than 1 % of cases have standardized residuals that are greater than 2.5 or less than -2.5 on the table of casewise diagnostics produced by SPSS, those extreme cases should be examined (Field, 2009). The 2010 model included 33 such cases, while 22 cases existed in the 2011 model. These numbers are outside of the limits. However, judging from Cook's distance, Mahalanobis distance and DFBeta, these cannot be considered as outliers that have undue influence on the models. Therefore, it is concluded that the two models obtained are accurate.

Conclusion

Two multiple regression analyses were carried out in this study in order to investigate factors that attribute to the increase in the amount of reading in an ER program. The first model obtained from the data of 1208 students who experienced ER for one academic year consists of 5 predictors. They are interesting books, reading faster, taking notes and reviewing unknown words, guessing the meaning of unknown words and not translating stories into Japanese. Translation influences this model most. The second model utilized the data of 1137 students who responded to the questionnaire after one semester in the ER program. The 3 predictors that emerged in this model are easy books, interesting books and no translation. How interesting books are has the most impact on the 2011 model. Surprisingly, the most influential predictor of each model appears in both models. Therefore,

it seems possible to generalize that the amount of reading is likely to increase when ER programs provide interesting books and learners stop translating English into Japanese.

What can be predicted by these models is not great in figures. Therefore, further research to search for stronger predictors is desirable. Although the current study has attempted to explore predictors that are controllable by instructors, other factors such as the amount of time that can be spared to do ER and the degree of interest in English leaning may need to be included in a future study.

Nonetheless, it is reasonable to confirm the accuracy of the two models from diagnostic statistics. Thus, it is suggested that program organizers keep pursing a variety of interesting books for students and instructors start exploring ways to encourage students to abandon the habit of translation while they read ER books. ER is to enhance reading fluency, and translation is at the other end of spectrum. It is important that ER programs help learners to shift the focus from accuracy to fluency by supplying intriguing books so that a good cycle of reading will be formulated.

Appendix A

Questionnaire in 2010

Q1: The books in your level were:

very easy. a little easy. just at the right level.
a little difficult. difficult.

Q2: The books you read in the ER program were:

very interesting. interesting to some extent.
not so interesting. not interesting at all.

Q3: Do you think reading easy books improves English?

I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q4: Do you think reading easy books is effective to acquire English grammar?

I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q5: Do you think reading easy books increases vocabulary?

I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q6: I have become able to read faster than before.

I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q7: I guess the meaning of words that I don't know from context.
I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q8: I keep reading ignoring words that I don't know.
I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q9: I look up a dictionary when I meet words that I don't know.
I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q10: I look at pictures and headings to understand a story.
I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q11: I take notes of difficult words and review them.
I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Q12: I translate English into Japanese while reading.
I strongly think so. I fairly think so. I cannot decide.
I somewhat don't think so. I don't think so at all.

Questionnaire in 2011

*Refer to *Questionnaire in 2010* for Q1 to Q6.

Q7: How much do you translate English into Japanese when reading ER books?
Not at all. Just a little. 20% to 30%.
50%. 70% to 80%. Almost all.

Q8: Has the amount of translation reduced since April when you started the ER program?
Very much. Fairly. To some extent. Not at all.

References

Brown R., Waring R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign Language, 20*(2), 136-163.

Camiciottoli, B. C. (2001). Extensive reading in English: Habits and attitudes of a group of Italian university EFL students. *Journal of Research in Reading, 24*(2), 135-153.

Cook, G. (2010). *Translation in language teaching*. Oxford: Oxford University Press.

Day, R. R., & Bamford, J. (1998). *Extensive reading in the second language classroom*. New York: Cambridge University Press.

Elley, W. B. (1991). Acquiring literacy in a second language: The effect of book-based programs. *Language Learning, 41*(3), 375-411.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: Sage Publications Inc.

Furukawa, A. (2008). Extensive reading from the first day of English learning. *Extensive Reading in Japan, 1*(2), 11-14.

Helgesen, M. (2008). Reading reaction reports: Options and alternatives for student book reports. *Extensive Reading in Japan, 1*(2), 4-10.

House, J. (2009). *Translation*. Oxford: Oxford University Press.

Krashen, S.D. (2004) *The power of reading: Insights from the research* (2nd. Ed.). CT: Libraries Limited.

Mason, B., & Krashen, S. (1997). Extensive reading in English as a foreign language. *System, 25*(1), 91-102.

Nishizawa, H., Yoshioka, T., & Ito, K. (2010). The effectiveness of a 5-year extensive reading program. *JERA Bulletin, 4*, 2-14.

Nuttall, C. (1982). *Teaching reading skills in a foreign language*. Oxford: Heinemann.

Oda, T. (2007). *Urutora bigina no tameno SPSS ni yoru tokei kaiseki nyumon* [Introduction to statistical analysis using SPSS for ultra-beginners]. Nagano: Pleiades Publishing House.

O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. New York: Cambridge University Press.

Price, C. J., Green, D. W., & von Studnitz, R. (1999). A functional imaging study of translation and language switching. *Brain, 122*, 2221-2235.

Renandya, W. A., Rajan, B. R. S., & Jacobs, G. M. (1999). Extensive reading with adult learners of English as a Second Language. *RELC Journal, 30*, 39-61.

Saito, Y., Horwitz, E. K., & Garza, T. J. (1999). Foreign language reading anxiety. *The Modern Language Journal, 83*(2), 202-218.

Sakurai, N. (2011). The relationship between the total number of words read and test scores in an extensive reading program. *ACTA Humanistica Et Scientifica Universitatis Sangio Kyotiensis Humanities Series, 43*, 112-122.

Takase, A. (2007). Japanese high school students' motivation for extensive L2 reading. *Reading in a Foreign Language, 19*(1), 1-18.

Takase, A. (2010). *Eigo tadoku tacho shido manyuaru* [Manual for teaching extensive reading and listening]. Tokyo: Taishukan Publishing, Co., Ltd.

Wolf, M. (2008). *Proust and the squid: The story and science of the reading brain* (J. Komatsu, Trans.). Tokyo: Intershift Inc. (Original work published in 2007)

面白い図書と和訳しないこと：多読プログラムで読書量を増やす要素

桜　井　延　子

要　約

本稿は，多読プログラムで読書量を増やす予測変数について述べるものである。総読書量を従属変数としアンケートへの回答を独立変数とした重回帰分析を大学１年生の２グループに関して行った結果，*t* 値から一つ目のモデルへ最も影響力のある予測変数は日本語に訳さずに読むということで，図書の面白さが２つ目のモデルに最も貢献していることが分かった。この２回の分析では，グループ間で多読経験の期間に差があったのにも関わらず，興味深い図書と和訳をしないという予測変数が両モデルで確認された。調整済み R^2 値からは本研究に使用された独立変数以外に読書量に影響を与える変数が存在することが読み取れるが，学習者の興味を引く図書と訳さずに読むという２点が多読量の増加に繋がることが示唆された。

キーワード：多読，読書量，重回帰分析，予測変数，和訳